AUSTRALIA

National Measurement Amendment Regulations 2004 (No. 1)[1]

Statutory Rules 2004 No. 1[2]

132

I, PHILIP MICHAEL JEFFERY, Governor-General of the Commonwealth of Australia, acting with the advice of the Federal Executive Council, make the following Regulations under the *National Measurement Act 1960*.

Dated 10 JUN 2004 2004

PM Jeffery
Governor-General

By His Excellency's Command

WARREN ENTSCH
Parliamentary Secretary to the Minister for Industry, Tourism and Resources

Page

Contents

1 Name of Regulations

These Regulations are the *National Measurement Amendment Regulations 2004 (No. [ ).*

2 Commencement

These Regulations commence as follows:

(a) on 1 July 2004 — regulations 1 to 3 and Schedule 1;

(b) on 1 July 2005 — Schedule 2.

3 Amendment of *National Measurement Regulations 1999*

Schedules 1 and 2 amend the *National Measurement Regulations 1999.*

Schedule 1 Amendments commencing on 1 July 2004

(regulation 3)

[1] Regulation 3, definition of *permissible variation*

substitute

maximum permissible uncertainty, for a standard of measurement, means the maximum uncertainty permitted in the verification of the standard under these Regulations.

maximum permissible variation, for a standard of measurement, means the maximum amount by which the standard may differ from the denomination indicated by the standard in these Regulations.

[2] Regulation 3, definition of *standard reference conditions*

omit

[3] Regulation 3, definition of *verifying authority*, paragraph (b)

omit

[4] Regulation 5, note

substitute

Note The Chief Metrologist may issue written guidelines governing the way in which Australian legal units of measurement may be combined to produce an Australian legal unit of measurement — see Act, paragraph 7B (1) (a).

[5] Regulation 7, note

substitute

Note The Chief Metrologist may issue written guidelines governing the way in which Australian legal units of measurement or a combination of Australian legal units of measurement may be combined with these prefixes to produce Australian legal units of measurement — see Act, paragraph 7B (1) (b).

[6] Subregulation 16 (3)

omit

13 (3)

insert

13 (4)

[7] Paragraph 18 (2) (e)

omit

range of

[8] Subregulation 18 (3)

omit

[9] Paragraph 19 (1) (f)

omit

range of

[10] Subregulations 20 (1) and (2)

substitute

(1) The Chief Metrologist must send a copy of a determination made under subregulation 17 (2), 18 (4) or 19 (2) to each verifying authority appointed to verify standards of measurement to which the determination relates.

[11] Subregulation 20 (3)

omit

subregulation (1) or (2).

insert

subregulation (1).

[12] Regulation 21

substitute

21 Recognition of foreign reference standards of measurement

(1) The Chief Metrologist may issue a written notice recognising a reference standard of measurement that is verified (however described) in a foreign country as a reference standard of measurement if:

(a) the verified values of the standard of measurement are established by means of, by reference to, by comparison with or by derivation from the primary standards of measurement of the foreign country; and

(b) appropriate comparability is established between:

(i) the relevant primary standards of measurement of the foreign country; and

(ii) one or more Australian primary standards of measurement.

(2) A recognised reference standard of measurement is taken to be a verified reference standard of measurement.

(3) A written notice issued under subregulation (1) in relation to a reference standard of measurement is taken to be a certificate issued under regulation 19 for the reference standard of measurement.

[13] Regulation 24

omit

[14] Regulation 25, heading

substitute

25 Accuracy of State secondary standards of measurement — maximum permissible uncertainty

[15] Regulation 26, heading

substitute

26 Accuracy of State tertiary standards of measurement — maximum permissible uncertainty

[16] Regulation 27, heading

substitute

27 Accuracy of Inspectors' Class 1 standards of measurement — maximum permissible uncertainty

[17] Regulation 28, heading

substitute

28 Accuracy of Inspectors' Class 2 standards of measurement — maximum permissible uncertainty

[18] Regulation 29, heading

substitute

29 Accuracy of Inspectors' Class 3 standards of measurement — maximum permissible uncertainty

[19] Subregulation 39 (2)

omit

subregulation (3)

insert

subregulation (1)

[20] Subregulation 39 (3)

substitute

(3) The Chief Metrologist must give a copy of a determination made under subregulation (1) to each certifying authority appointed in relation to a measuring instrument to which the determination applies.

[21] Subregulation 39 (4)

omit

subregulation (3).

insert

subregulation (1).

[22] Regulation 40

substitute

40 Recognition of foreign certification of measuring instruments

(1) The Chief Metrologist may issue a written notice recognising a measuring instrument that has been certified (however described) in a foreign country as a certified measuring instrument if:

(a) the certified values of the measuring instrument are established by means of, by reference to, by comparison with or by derivation from, the primary standards of measurement of the foreign country; and

(b) appropriate comparability is established between:

(i) the relevant primary standards of measurement of the foreign country; and

(ii) one or more Australian primary standards of measurement.

(2) A recognised measuring instrument is taken to be a certified measuring instrument.

(3) A written notice issued under subregulation (1) in relation to a measuring instrument is taken to be a certificate issued under regulation 37 for the measuring instrument.

[23] Regulation 53

substitute

53 Recognition of foreign reference materials

(1) The Chief Metrologist may issue a written notice recognising a reference material, or a reference material of a stated kind, that is certified (however described) in a foreign country as a certified reference material if:

(a) the certified values of the reference material, or of reference materials of that kind, are established by means of, by reference to, by comparison with or by derivation from, the primary standards of measurement of the foreign country; and

(b) appropriate comparability is established between:

(i) the relevant primary standards of measurement of the foreign country; and

(ii) one or more Australian primary standards of measurement.

(2) A recognised reference material, or a recognised reference material of a stated kind, is taken to be a certified reference material.

(3) A written notice issued under subregulation (1) in relation to a reference material, or a reference material of a stated kind, is taken to be a certificate issued under regulation 48 for the reference material or the reference material of that kind.

[24] Subregulation 60 (2)

omit

certifying

insert

approving

[25] After subregulation 60 (3)

insert

(3A) The Chief Metrologist may issue a certificate of approval other than on application.

[26] Subregulation 61 (2)

omit

certifying

insert

approving

[27] After subregulation 61 (4)

insert

(5) The Chief Metrologist may, other than on application, vary a certificate of approval issued by the Chief Metrologist.

[28] Regulation 68

substitute

68 Effect of variation and cancellation of approvals

If an approved pattern is varied or cancelled under this Part or under Part 8, a measuring instrument manufactured in accordance with the pattern before the variation or cancellation has effect is taken to continue to be in accordance with a pattern approved under these Regulations.

[29] Subregulation 73 (1)

substitute

(1) On application under regulation 72, the Chief Metrologist may appoint as a verifying or certifying authority an applicant who:

(a) in the opinion of the Chief Metrologist, is capable, or has direct control of staff who are capable, of verifying a standard of measurement, or certifying a measuring instrument or reference material, to which the application relates; or

(b) holds National Association of Testing Authorities accreditation that the Chief Metrologist considers appropriate to the functions mentioned in paragraph (a).

[30] Subregulation 79 (1)

substitute

(1) The grounds for cancelling the appointment of an authority, other than on application, are as follows:

(a) that the authority has not complied with a condition to which the appointment is subject;

(b) that, in the opinion of the Chief Metrologist, the authority does not have the necessary or appropriate facilities or standards to perform the functions or duties to which the appointment relates;

(c) that, in the opinion of the Chief Metrologist, the authority does not have the necessary competent staff to perform the functions or duties to which the appointment relates.

[31] Regulation 87

substitute

87 Exempt utility meters (Act s 3)

For the definition of ***utility meter*** in subsection 3 (1) of the Act, the following classes of meters are exempted from the operation of Part VA of the Act:

(a) gas meters;

(b) electricity meters;

(c) water meters installed before 1 July 2004;

(d) water meters installed on or after 1 July 2004, other than cold water meters with:

(i) a maximum continuous flow rate capacity of not more than 4 000 litres per hour; and

(ii) maximum permissible errors mentioned in clause 13 of Division 3 of Part 1 of Schedule 12.

Note Meters with a maximum continuous flow rate capacity of not more than 4 000 litres per hour are normally, but not exclusively, used for metering water supply to domestic premises.

[32] Regulation 88A

omit

[33] After regulation 90

insert

90A Identity cards

For subsection 18ZN (1) of the Act, an identity card issued to a person must set out the following information:

(a) the person's full name;

(b) the name of the Commonwealth, State or Territory authority that employs the person or the name of the office that the person holds;

(c) a statement that the person has been appointed by the Secretary as an authorised officer under section 18ZM of the Act;

(d) a statement that the powers and obligations of an authorised officer are set out in Division 5 of Part VA of the Act;

(e) the person's signature;

(f) the date of issue of the card;

(g) the identity card number;

(h) the expiry date of the identity card;

(i) instructions for the return of a lost identity card if found.

90B Fees

(1) For paragraph 20 (1) (l) of the Act, the fees for activities undertaken by the Commonwealth are set out in Schedule 13.

(2) In Schedule 13, level 1 applies to the following kinds of measuring instruments:

(a) simple liquor measures or dispensers;

(b) class 3 and 4 weighing instruments ≤100 kg;

(c) simple indicators or counters (for example, for weighing and flow);

(d) driveway flowmeter fuel dispenser consoles (excluding computer-based systems);

(e) pulse counters generators;

(f) milk tanks;

(g) vehicle and other tanks.

(3) In Schedule 13, level 2 applies to the following kinds of measuring instruments:

(a) multi-liquor measuring systems;

(b) class 1 and 2 weighing instruments;

(c) class 3 and 4 weighing instruments >100 kg;

(d) load cells;

(e) overhead-track weighing instruments;
(f) driveway flowmeters fuel dispensers (except liquefied petroleum gas flowmeters and multiproduct pumps);
(g) semi-automatic multi-dimensional measuring instruments;
(h) tank level gauges (excluding volume conversion devices);
(i) electronic flowmeter indicators or calculators;
(j) indicators with conversion or linearisation functions;
(k) milk meters;
(l) computer operated consoles for fuel dispensers;
(m) static wheel weighers;
(n) length measuring instruments;
(o) area measuring instruments;
(p) mass flowmeters.

(4) In Schedule 13, level 3 applies to the following kinds of measuring instruments:
(a) milk metering systems;
(b) belt weighers;
(c) bulk flowmeters (including mass meters);
(d) weighing-in-motion systems for trains and road vehicles;
(e) catchweighers;
(f) controllers and indicator calculators with conversion or linearisation functions;
(g) totalising hopper weighers;
(h) multi-product fuel dispensers and driveway and bulk flowmeters for liquefied petroleum gas;
(i) automatic multi-dimensional measuring instruments.

[34] Regulation 93, heading

substitute

93 Transitional — 1 October 1999

[35] Subregulations 93 (1) and (2)

omit

[36] Subregulation 93 (4)

omit

An

insert

Subject to subregulation (4A), an

[37] After subregulation 93 (4)

insert

(4A) An appointment mentioned in subregulation (4) expires:

(a) if an expiry date is not specified in the instrument of appointment — on 1 July 2005; and

(b) if an expiry date is specified in the instrument of appointment — on that date.

[38] After regulation 93

insert

94 Transitional — 1 July 2004

(1) In this regulation:

certificate of approval includes a varied certificate of approval.

Commission means the National Standards Commission.

Organisation means the Commonwealth Scientific and Industrial Research Organisation established under the *Science and Industry Research Act 1949*.

(2) An instrument issued by the Commission under regulation 21, 40 or 53 before 1 July 2004 is taken to be a written notice issued by the Chief Metrologist under that regulation.

(3) A determination that was made by the Commission or the Organisation under these Regulations and that was in force immediately before 1 July 2004 continues to have effect on and after that day as if it had been made by the Chief Metrologist under these Regulations.

(4) A certificate of approval issued by the Commission under these Regulations before 1 July 2004 is taken to be issued by the Chief Metrologist under these Regulations.

(5) A certificate issued under these Regulations before 1 July 2004 by the Commission or the Organisation acting in the capacity of a certifying authority is taken to be issued by the Chief Metrologist under these Regulations, subject to any condition stated in the certificate.

(6) A certificate of verification issued under these Regulations before 1 July 2004 by the Commission or the Organisation acting in the capacity of a verifying authority is taken to be issued by the Chief Metrologist under these Regulations, for the period, if any, for which the certificate is given.

(7) Subject to regulations 68 and 69, the cancellation, variation or withdrawal of an instrument by the Commission under Part 6 or 8 before 1 July 2004 is taken to be a cancellation, variation or withdrawal of the instrument by the Chief Metrologist under that Part.

(8) An appointment made by the Commission under these Regulations before 1 July 2004 is taken to be an appointment by the Chief Metrologist under these Regulations.

[39] Schedule 1, Part 2, after item 2.20

insert

2.21	catalytic activity	katal	kat	The katal is a unit of catalytic activity equal to 1 mole per second.

[40] Schedule 1, Part 3, items 3.13, 3.14 and 3.15

omit each mention of

interval

[41] Schedules 4 to 10

substitute

Schedule 4 Maximum permissible uncertainty — length (State primary and secondary standards)

(paragraphs 18 (5) (a) and 25 (a))

Column 1 Denomination	Column 2 Maximum permissible uncertainty (at 95% confidence interval): State primary standard	Column 3 Maximum permissible uncertainty (at 95% confidence interval): State secondary standard
Part 1 Flexible standards		
≤ 10 m	0.08 mm	0.15 mm
> 10 m	0.001%	0.002%
Part 2 Rigid standards		
≤ 1 m	0.008 mm	0.015 mm

Schedule 5 Maximum permissible uncertainty — mass (State primary, secondary and tertiary standards)

(paragraphs 18 (5) (b) and (c), 25 (b) and 26 (a) and subparagraphs 25 (d) (i) and 26 (c) (i))

Column 1 Denomination	Column 2 Maximum permissible uncertainty (at 95% *confidence* interval): State primary standard (in mg)	Column 3 Maximum permissible uncertainty (at 95% *confidence* interval): State secondary standard (in mg)	Column 4 Maximum permissible uncertainty (at 95% *confidence* interval): State tertiary standard (in mg)
50 kg		115.000	150.00
25 kg		55.000	75.00
20 kg	15.000	45.000	60.00
10 kg	8.000	20.000	30.00
5 kg	4.000	10.000	15.00
2 kg	2.000	5.000	10.00
1 kg	1.000	2.000	7.00
500 g	0.400	1.100	4.90
200 g	0.200	0.500	3.20
100 g	0.100	0.200	2.30
50 g	0.040	0.110	1.60
20 g	0.020	0.050	1.00
10 g	0.010	0.020	0.70
5 g	0.010	0.020	0.49
2 g	0.010	0.020	0.32
1 g	0.010	0.020	0.23
500 mg	0.004	0.010	0.16
200 mg	0.004	0.010	0.10
100 mg	0.004	0.010	0.07

Column 1	Column 2	Column 3	Column 4
Denomination	**Maximum permissible uncertainty (at 95% confidence interval): State primary standard (in mg)**	**Maximum permissible uncertainty (at 95% confidence interval): State secondary standard (in mg)**	**Maximum permissible uncertainty (at 95% confidence interval): State tertiary standard (in mg)**
50 mg	0.002	0.005	0.05
20 mg	0.002	0.005	0.03
10 mg	0.002	0.005	0.02
5 mg	0.002	0.005	0.02
2 mg	0.002	0.005	0.01
1 mg	0.002	0.005	0.01

Schedule 6 Maximum permissible uncertainty — volume (State secondary and tertiary standards)

(paragraph 25 (c), subparagraph 25 (d) (ii), paragraph 26 (b) and subparagraph 26 (c) (ii))

Column 1	Column 2	Column 3
Denomination	**Maximum permissible uncertainty (at 95% confidence interval): State secondary standard (in mL)**	**Maximum permissible uncertainty (at 95% confidence interval): State tertiary standard (in mL)**
10 000 L	750.000	1 500.000
5 000 L	400.000	750.000
2 000 L	150.000	300.000
1 000 L	75.000	150.000
500 L	40.000	75.000
200 L	15.000	30.000
100 L	8.000	15.000

Column 1 Denomination	Column 2 Maximum permissible uncertainty (at 95% confidence interval): State secondary standard (in mL)	Column 3 Maximum permissible uncertainty (at 95% confidence interval): State tertiary standard (in mL)
50 L	4.000	7.000
20 L	1.500	4.000
15 L	1.100	3.000
10 L	0.800	2.000
5 L	0.400	2.000
2 L	0.200	1.000
1 L	0.100	0.500
500 mL	0.040	0.300
250 mL	0.020	0.200
200 mL	0.020	0.170
100 mL	0.010	0.110
50 mL	0.004	0.070
25 mL	0.004	0.050
20 mL	0.004	0.040
10 mL	0.004	0.020
5 mL	0.004	0.020
2 mL	0.004	0.010
1 mL	0.002	0.003
0.5 mL	0.001	0.002
0.2 mL	0.001	0.002
0.1 mL	0.001	0.002

Schedule 7 Maximum permissible uncertainty and maximum permissible variation — length (Inspectors' Class 1 and Class 2 standards)

(paragraphs 27 (a), 28 (a), 32 (a) and 33 (a))

Column 1 Denomination	Column 2 Maximum permissible uncertainty (at 95% confidence interval): Inspectors' Class 1 standard	Column 3 Maximum permissible variation: Inspectors' Class 1 standard	Column 4 Maximum permissible uncertainty (at 95% confidence interval): Inspectors' Class 2 standard	Column 5 Maximum permissible variation: Inspectors' Class 2 standard
Part 1 Flexible standards				
≤ 10 m	0.4 mm	1.5 mm	1.1 mm	5.0 mm
> 10 m	0.004%	0.015%	0.011%	0.05%
Part 2 Rigid standards				
≤ 500 mm	0.04 mm	0.15 mm		
> 500 mm but ≤ 1 m	0.04 mm	0.20 mm		
> 1 m but ≤ 2 m	0.05 mm	0.20 mm		

Schedule 8 Maximum permissible uncertainty and maximum permissible variation — area (Inspectors' Class 1 standards)

(paragraph 27 (b), subparagraph 27 (e) (i) and regulation 32)

Column 1 Denomination not exceeding (in dm^2)	Column 2 Maximum permissible uncertainty (at 95% confidence interval) (in dm^2)	Column 3 Maximum permissible variation (in dm^2)
≤35	0.05	0.18
40	0.05	0.20
50	0.06	0.25
60	0.08	0.30
70	0.09	0.35
80	0.10	0.40
90	0.11	0.45
100	0.13	0.50
150	0.15	0.75

Schedule 9 Maximum permissible uncertainty and maximum permissible variation — mass (Inspectors' Class 1, Class 2 and Class 3 standards)

(paragraph 27 (c), subparagraph 27 (e) (ii), paragraphs 28 (b) and (c) and regulations 29, 32, 33 and 34)

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
Denomination	Maximum permissible uncertainty (at 95% confidence interval): Inspectors' Class 1 standard (in mg)	Maximum permissible variation: Inspectors' Class 1 standard (in mg)	Maximum permissible uncertainty (at 95% confidence interval): Inspectors' Class 2 standard (in mg)	Maximum permissible variation: Inspectors' Class 2 standard (in mg)	Maximum permissible uncertainty (at 95% confidence interval): Inspectors' Class 3 standard (in mg)	Maximum permissible variation: Inspectors' Class 3 standard (in mg)
10 000 kg					177 000	700 000
1 000 kg					17 700	70 000
500 kg					8 800	35 000
200 kg					3 500	14 000
100 kg					1 750	7 000
50 kg	150.00	200.00	150.00	400.000	870	3 500
25 kg	75.00	100.00	75.00	200.000	440	1 750
20 kg	60.00	80.00	60.00	160.000	380	1 550
10 kg	30.00	40.00	30.00	80.000	270	1 100
5 kg	15.00	28.00	15.00	55.000	200	780
2 kg	10.00	18.00	10.00	35.000	125	500
1 kg	7.00	13.00	7.00	25.000	85	350
500 g	4.90	9.00	4.90	18.000	60	250
200 g	3.20	6.00	3.20	11.000	40	160
100 g	2.30	4.00	2.30	8.000	25	110

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
Denomination	Maximum permissible uncertainty (at 95% confidence interval): Inspectors' Class 1 standard (in mg)	Maximum permissible variation: Inspectors' Class 1 standard (in mg)	Maximum permissible uncertainty (at 95% confidence interval): Inspectors' Class 2 standard (in mg)	Maximum permissible variation: Inspectors' Class 2 standard (in mg)	Maximum permissible uncertainty (at 95% confidence interval): Inspectors' Class 3 standard (in mg)	Maximum permissible variation: Inspectors' Class 3 standard (in mg)
50 g	1.60	3.00	1.60	5.000		
20 g	1.00	2.00	1.00	3.500		
10 g	0.70	1.50	0.70	2.500		
5 g	0.49	1.00	0.49	2.000		
2 g	0.32	0.60	0.32	1.000		
1 g	0.23	0.40	0.23	0.800		
500 mg	0.16	0.30	0.16	0.600		
200 mg	0.10	0.20	0.10	0.350		
100 mg	0.07	0.15	0.07	0.250		
50 mg	0.05	0.10	0.05	0.200		
20 mg	0.03	0.06	0.03	0.100		
10 mg	0.02	0.04	0.02	0.080		
5 mg	0.02	0.03	0.02	0.060		
2 mg	0.01	0.02	0.01	0.035		
1 mg	0.01	0.02	0.01	0.025		

Schedule 10 Maximum permissible uncertainty and maximum permissible variation — volume (Inspectors' Class 1 standards)

(paragraph 27 (d), subparagraph 27 (e) (iii) and regulation 32)

Column 1 Denomination	Column 2 Maximum permissible uncertainty (at 95% confidence interval) (in mL)	Column 3 Maximum permissible variation (in mL)
10 000 L	1 500.000	6 000.00
5 000 L	750.000	3 000.00
2 000 L	300.000	1 200.00
1 000 L	150.000	600.00
500 L	75.000	300.00
200 L	30.000	120.00
100 L	15.000	60.00
50 L	7.000	27.00
20 L	4.000	15.00
15 L	3.000	12.00
10 L	2.000	9.00
5 L	2.000	6.00
2 L	1.000	3.00
1 L	0.500	2.00
500 mL	0.300	1.20
250 mL	0.200	0.80
200 mL	0.170	0.70
100 mL	0.110	0.40
50 mL	0.070	0.27
25 mL	0.050	0.17

Column 1 Denomination	Column 2 Maximum permissible uncertainty (at 95% confidence interval) (in mL)	Column 3 Maximum permissible variation (in mL)
20 mL	0.040	0.15
10 mL	0.020	0.09
5 mL	0.020	0.06
2 mL	0.010	0.03
1 mL	0.003	0.02
0.5 mL	0.002	0.01
0.2 mL	0.002	0.01
0.1 mL	0.002	0.01

[42] Schedule 12, Part 1, after clause 3.3

insert

3.3A Beverage dispensers for alcoholic liquor

	Maximum permissible error	
Capacity (mL)	Verification/certification	Reverification
10	±0.5 mL	+1.0, –0.5 mL
15	±0.6 mL	+1.2, –0.6 mL
30	±1.0 mL	+2.0, –1.0 mL
60–100	±1.5 mL	+3.0, –1.5 mL
> 100	±1.5% of quantity dispensed	+3.0%, –1.5% of quantity dispensed

[43] Schedule 12, Part 1, clause 3.5, heading

substitute

3.5 Portable measures for potable liquids

[44] Schedule 12, Part 1, clause 3.8, table heading

after

error

insert

at each scale mark on a particular measure

[45] Schedule 12, Part 1, Division 2, heading

substitute

Division 2 Measuring instruments

[46] Schedule 12, Part 1, clause 6, at the foot

insert

Maximum capacity (L)	Maximum scale interval (L)
≤ 1 000	2
1 000 ≤ 2 500	5
2 500 ≤ 5 000	10
5 000 ≤ 10 000	20
10 000 ≤ 25 000	50

[47] Schedule 12, Part 1, after subclause 8.2.3

insert

8.2.4 Maximum permissible errors on calculators

Maximum permissible errors on quantities of liquid indications applicable to calculators, positive or negative, when they are tested separately, are equal to $^1/_{10}$ the maximum permissible error defined in line A of table 2. However, the magnitude of the maximum permissible error must not be less than one half-scale interval of the measuring system in which the calculator is intended to be included.

[48] Schedule 12, Part 1, clause 8.5

omit

[49] Schedule 12, Part 1, clause 9.3

substitute

9.3 Belt weighers

Class	Maximum permissible error
0.5	±0.25%
1.0	±0.5%
2.0	±1.0%

[50] Schedule 12, Part 1, after clause 9.3

insert

9.4 Catch weighers

The maximum permissible error for any load equal to or greater than the minimum capacity and equal to or less than the maximum capacity in automatic operation is:

Load (*m*) expressed in verification scale intervals (*e*)		**Maximum permissible error for class Y(y) instruments**	
Class Y (a)	**Class Y (b)**	**Initial verification**	**In-service**
0<m ≤ 500	0<m ≤ 50	±1.5 *e*	±2 *e*
500<m ≤ 2 000	50<m ≤ 200	±2 *e*	±3 *e*
2 000<m ≤ 10 000	200<m ≤ 1 000	±2.5 *e*	±4 *e*

[51] Schedule 12, Part 1, clause 10.1

omit everything after paragraph (d), insert

An instrument may be in an accuracy class for wagon weighing that is different from that for train weighing.

[52] Schedule 12, Part 1, subclause 10.2.1

omit everything after Table 1, insert

10.2.1.1 Wagon weighing

The maximum permissible error for coupled or uncoupled wagon weighing is the greatest of the following values:

(a) the value calculated according to table 1, rounded to the nearest scale interval (***d***);

(b) the value calculated according to table 1, rounded to the nearest scale interval for the weight of a single wagon equal to 35% of the maximum wagon weight (as inscribed on the descriptive markings);

(c) 1 *d*.

10.2.1.2 Train weighing

The maximum permissible error for coupled or uncoupled wagon weighing is the greatest of the following values:

(a) the value calculated according to table 1, rounded to the nearest scale interval (***d***);

(b) the value calculated according to table 1 for the weight of a single wagon equal to 35% of the maximum wagon weight (as inscribed on the descriptive markings) multiplied by the number of reference wagons in the train (not exceeding 10 wagons) and rounded to the nearest scale interval;

(c) 1 *d* for each wagon in the train, but not exceeding 10 *d*.

[53] Schedule 12, Part 1, after clause 10

insert

11 Multi-dimensional measuring (cubing) instruments

11.1 Scale intervals, minimum dimension

The lower limit of the minimum dimension for all values of the scale interval (***d***) is:

Scale interval (*d*)	Minimum dimension (lower limit)
$d \leq 2$ cm	10 *d*
2 cm $< d \leq 10$ cm	20 *d*
10 cm $< d$	50 *d*

11.2 Value of maximum permissible error

The maximum permissible error applicable to the measurement by the instrument of any of the 3 dimensions for initial and subsequent verification is ± 1 *d*.

12 Grain protein measuring instruments

The maximum permissible errors at verification, certification and reverification are:

(a) wheat — 0.4%; and

(b) barley — 0.5%.

Division 3 Utility meters

13 Water meters

13.1 Maximum permissible errors

13.1.1 The maximum permissible errors for water meters are:

Table 1 Maximum permissible errors (%)

Initial verification	In-service
±5% in the flow rate range where the flow rate (Q) is greater than or equal to the minimum flow rate (Q_1)and less than the transitional flow rate (Q_2). ie: $Q_1 \leq Q < Q_2$ ±2% in the flow rate range if the flow rate (Q) is greater than or equal to the transitional flow rate (Q_2) and less than or equal to the maximum flow rate (Q_4). ie: $Q_2 \leq Q \leq Q_4$	±4% in the flow rate range if the flow rate (Q) is greater than or equal to 0.075 times the maximum continuous flow rate (Q_3) and less than or equal to the maximum flow rate (Q_4). ie: $0.075\ Q_3 \leq Q \leq Q_4$

Note The definitions in this table are taken from NSC R 49-1, which is based on OIML R 49-1:2000.

[54] Schedule 12, Part 2

substitute

Part 2 Reverification or in-service inspection of measures and measuring instruments

The maximum permissible errors (where *v* is the absolute value of the maximum permissible error at certification or verification) for measures and measuring instruments for use for trade, except utility meters, are:

		Maximum permissible error	
Item	**Measure or measuring instrument**	**Deficiency**	**Excess**
1	Measure of length	v	v
2	Measure of weight	0.5v	v
3	Measures of volume		
	(a) Glass measures		
	(i) Line measures	v	v
	(ii) Brim measures	0	v
	(b) Metal measures		
	(i) Line measures	2v	2v
	(ii) Brim measures	v	v
4	Length-measuring instruments	2v	2v
5	Area-measuring instruments	2v	2v
6	Farm milk tanks	v	v
7	Vehicle tanks	v	v
8	Liquid-measuring instruments	v	v
9	Weighing instruments	v	v
10	Weighing-in-motion	2v	2v
11	Beverage measures	v	2v

[55] After Schedule 12

insert

Schedule 13 Fees

(regulation 90B)

Part 1 Examination and certification of patterns of measuring instruments

Division 1 Volume measuring instruments

Item	Activity code	Activity	Fee ($) Level 1	Level 2	Level 3
1.1	AP	Application for examination	220	220	220
1.2	IA	Initial assessment	440	880	1 430
1.3	IP	Initial performance	1 650	3 520	4 620
1.4	TT	Temperature test	1 320	1 650	1 760
1.5	HU	Humidity test	1 540	1 760	1 870
1.6	VT	Voltage test	550	660	770
1.7	LB	Line-borne test	660	660	660
1.8	SD	Static discharge test	880	990	1 100
1.9	EMS	Electromagnetic susceptibility tests	1 650	1 870	1 980
1.10	ESS	Endurance span stability tests	1 100	1 540	2 090
1.11	EXT	Extra or miscellaneous tests	220	550	660
1.12	CHK	Completion of checklist	330	660	770
1.13	SR	Preparation of summary report	220	330	440
1.14	RSF	Resubmission	880	880	880

Item	Activity code	Activity	Fee ($) Level 1	Level 2	Level 3
1.15	CP	Issue of certificate of approval	440	550	660
1.16	HRS	Consultations, performance and other tests (plus charges for equipment used)	136.40/hr	136.40/hr	136.40/hr

Division 2 Weighing instruments

Item	Activity Code	Activity	Fee ($) Level 1	Level 2	Level 3
2.1	AP	Application for examination	220	220	220
2.2	IA	Initial assessment	440	550	660
2.3	IP	Initial performance	2 090	2 640	3 190
2.4	TT	Temperature test	2 090	2 310	2 750
2.5	HU	Humidity test	2 090	2 420	2 750
2.6	VT	Voltage test	660	880	990
2.7	LB	Line-borne test	660	770	880
2.8	SD	Static discharge test	880	1 100	1 320
2.9	EMS	Electromagnetic susceptibility tests	1 760	2 090	2 420
2.10	ESS	Endurance span stability tests	440	550	660
2.11	EXT	Extra or miscellaneous tests	550	660	770
2.12	CHK	Completion of checklist	660	880	990
2.13	SR	Preparation of summary report	440	550	660
2.14	RSF	Resubmission	880	880	880

Item	Activity Code	Activity	Fee ($) Level 1	Level 2	Level 3
2.15	CP	Issue of certificate of approval	440	660	770
2.16	HRS	Consultations, performance and other tests (plus charges for equipment used)	136.40/hr	136.40/hr	136.40/hr
2.17	GENCERT	Analysis of 6B/0 calculations	154	154	154

Division 3 Utility meters

Item	Activity code	Activity	Fee ($)
3.1	AP	Application for examination	220
3.2	SR	Preparation of summary report	1 650
3.3	CP	Issue of certificate of approval	660
3.4	HRS	Consultations, performance and other tests (plus charges for equipment used)	136.40/hr

Division 4 Examination and certification of patterns of measuring instruments under mutual recognition agreements

Item	Activity code	Activity	Fee ($)
4.1	AP	Application for examination	220
4.2	SR	Preparation of summary report	1 650
4.3	CP	Issue of certificate of approval	660
4.4	HRS	Consultations, performance and other tests (plus fees for equipment used)	136.40/hr

Division 5 Additional fees for use of equipment

Item	Activity code	Equipment used	Fee ($/hr)
5.1	LARLOA	Large load cell facility (capacity 600 kg to 50 000 kg)	44
5.2	SMALOA	Small load cell facility (capacity 50 kg to 500 kg)	33
5.3	LIQHYD	Liquid hydrocarbons test facility	132
5.4	LPG	Liquefied petroleum gas test facility	55
5.5	TEMP	Temperature controlled chamber	22
5.6	HUM	Humidity test chamber	33
5.7	REL	Reliability testing equipment	11
5.8	LINBOR	Line-borne interference test equipment	44
5.9	EMS	Electromagnetic susceptibility testing chamber	110
5.10	ESD	Electrostatic discharge test equipment	44

Part 2 Verification of utility meters used for trade

Item	Activity code	Activity	Fee ($)
1	VUM	Verification of utility meters	1 000

[56] Further amendments — Chief Metrologist

Provision	*omit each mention of*	*insert*
Regulation 3, definition of ***approving authority***, paragraph (a)	Commission;	Chief Metrologist;
Regulation 3, definition of ***certifying authority***, paragraph (a)	Commission or the Organisation;	Chief Metrologist;

Provision	*omit each mention of*	*insert*
Regulation 3, definition of ***certifying authority***, paragraph (b)	Commission;	Chief Metrologist;
Regulation 3, definition of ***verifying authority***, paragraph (a)	Organisation;	Chief Metrologist;
Regulation 3, note	• the Commission • the Organisation	• the Chief Metrologist
Regulation 9	Organisation	Chief Metrologist
Paragraph 12 (2) (a)	Commission	Chief Metrologist
Subregulation 16 (2)	Organisation	Chief Metrologist
Subregulation 17 (2)	Organisation.	Chief Metrologist.
Subregulation 18 (4)	Organisation.	Chief Metrologist.
Subregulation 19 (2)	Commission.	Chief Metrologist.
Paragraph 36 (2) (a)	Commission	Chief Metrologist
Subregulation 39 (1)	Commission	Chief Metrologist
Paragraph 46 (2) (a)	Commission	Chief Metrologist
Subregulation 51 (2)	Commission	Chief Metrologist
Regulation 52, heading	Commission	Chief Metrologist
Subregulation 52 (1)	Commission	Chief Metrologist
Subregulation 52 (2)	Commission	Chief Metrologist
Subregulation 52 (3)	Commission	Chief Metrologist
Paragraph 55 (j)	Commission	Chief Metrologist
Paragraph 58 (2) (a)	Commission	Chief Metrologist
Subregulation 60 (3)	Commission	Chief Metrologist
Subregulation 61 (3)	Commission	Chief Metrologist
Subregulation 61 (4)	Commission	Chief Metrologist
Paragraph 64 (1) (b)	Commission	Chief Metrologist
Subregulation 64 (2)	Commission	Chief Metrologist
Subregulation 64 (3)	Commission	Chief Metrologist

Provision	*omit each mention of*	*insert*
Paragraph 64 (3) (a)	Commission	Chief Metrologist
Subregulation 64 (4)	Commission	Chief Metrologist
Subregulation 64 (5)	Commission	Chief Metrologist
Paragraph 65 (1) (b)	Commission	Chief Metrologist
Paragraph 65 (1) (c)	Commission	Chief Metrologist
Subregulation 65 (2)	Commission	Chief Metrologist
Subregulation 65 (3)	Commission:	Chief Metrologist:
Paragraph 65 (3) (b)	Commission	Chief Metrologist
Subregulation 71 (1)	Commission	Chief Metrologist
Subregulation 71 (2)	Commission	Chief Metrologist
Paragraph 72 (1) (a)	Commission	Chief Metrologist
Paragraph 72 (1) (b)	Commission.	Chief Metrologist.
Subregulation 72 (2)	Commission	Chief Metrologist
Subregulation 72 (3)	Commission	Chief Metrologist
Subregulation 72 (4)	Commission	Chief Metrologist
Subregulation 73 (3)	Commission	Chief Metrologist
Subregulation 76 (1)	Commission	Chief Metrologist
Subregulation 76 (2)	Commission	Chief Metrologist
Subregulation 76 (4)	Commission	Chief Metrologist
Paragraph 77 (1) (a)	Commission	Chief Metrologist
Paragraph 77 (1) (b)	Commission;	Chief Metrologist;
Paragraph 77 (1) (c)	Commission,	Chief Metrologist,
Subregulation 78 (1)	Commission:	Chief Metrologist:
Subregulation 78 (2)	Commission	Chief Metrologist
Regulation 80, definition of ***Commission***	Commission	Chief Metrologist
Subregulation 82 (1)	Commission	Chief Metrologist
Paragraph 82 (1) (a)	Commission	Chief Metrologist
Paragraph 82 (1) (b)	Commission	Chief Metrologist

Provision	*omit each mention of*	*insert*
Paragraph 82 (1) (e)	Commission	Chief Metrologist
Subregulation 82 (2)	Commission	Chief Metrologist
Subregulation 82 (3)	Commission	Chief Metrologist
Subregulation 82 (4)	Commission	Chief Metrologist
Paragraph 82 (4) (b)	Commission	Chief Metrologist
Paragraph 83 (a)	Commission	Chief Metrologist
Paragraph 83 (b)	Commission	Chief Metrologist
Regulation 84, definition of ***decision maker***, paragraph (b)	Commission.	Chief Metrologist.
Schedule 1, Part 1, clause 1.1, note	Commission	Chief Metrologist

[57] Further amendments — maximum permissible uncertainty and maximum permissible variation

Provision	*omit each mention of*	*insert*
Paragraph 18 (5) (a)	amount of	maximum
Paragraph 18 (5) (b)	amount of	maximum
Paragraph 18 (5) (c)	amount of	maximum
Paragraph 23 (b)	not within the	exceeding the maximum
Paragraph 25 (a)	amount of	maximum
Paragraph 25 (b)	amount of	maximum
Paragraph 25 (c)	amount of	maximum
Paragraph 25 (d)	amount of	maximum
Paragraph 25 (d)	amounts of	maximum
Paragraph 26 (a)	amount of	maximum
Paragraph 26 (b)	amount of	maximum
Paragraph 26 (c)	amount of	maximum
Paragraph 26 (c)	amounts of	maximum

Provision	*omit each mention of*	*insert*
Paragraph 27 (a)	amount of	maximum
Paragraph 27 (b)	amount of	maximum
Paragraph 27 (c)	amount of	maximum
Paragraph 27 (d)	amount of	maximum
Paragraph 27 (e)	amount of	maximum
Paragraph 27 (e)	amounts of	maximum permissible
Paragraph 28 (a)	amount of	maximum
Paragraph 28 (b)	amount of	maximum
Paragraph 28 (c)	amount of	maximum
Paragraph 28 (c)	amounts of	maximum
Paragraph 29 (a)	amount of	maximum
Paragraph 29 (b)	amount of	maximum
Paragraph 29 (b)	amounts of	maximum
Regulation 30, heading	permissible	maximum permissible
Subregulation 30 (2)	permissible	maximum permissible
Regulation 30, note	permissible	maximum permissible
Regulation 31, heading	permissible	maximum permissible
Subregulation 31 (1)	permissible	maximum permissible
Subregulation 31 (2)	permissible	maximum permissible
Regulation 32, heading	Permissible	Maximum permissible
Regulation 32	permissible	maximum permissible
Paragraph 32 (a)	amount	maximum permissible variation
Paragraph 32 (b)	amount	maximum permissible variation
Paragraph 32 (b)	amounts of	maximum
Regulation 33, heading	Permissible	Maximum permissible
Paragraph 33 (a)	amount	maximum permissible variation

Provision	*omit each mention of*	*insert*
Paragraph 33 (b)	amount	maximum permissible variation
Paragraph 33 (b)	amounts of	maximum
Regulation 34, heading	Permissible	Maximum permissible
Regulation 34	permissible	maximum permissible
Paragraph 34 (a)	amount	maximum permissible variation
Paragraph 34 (b)	amount	maximum permissible variation
Paragraph 34 (b)	amounts of	maximum

Schedule 2 Amendments commencing on 1 July 2005

(regulation 3)

[1] Schedule 5

substitute

Schedule 5 Maximum permissible uncertainty — mass (State primary, secondary and tertiary standards)

(paragraphs 18 (5) (b) and (c), 25 (b) and 26 (a) and subparagraphs 25 (d) (i) and 26 (c) (i))

Column 1	Column 2	Column 3	Column 4
Denomination	**Maximum permissible uncertainty (at 95% confidence interval): State primary standard (in mg)**	**Maximum permissible uncertainty (at 95% confidence interval): State secondary standard (in mg)**	**Maximum permissible uncertainty (at 95% confidence interval): State tertiary standard (in mg)**
50 kg		84.000	267.00
25 kg		42.000	127.00
20 kg	10.000	33.000	100.00
10 kg	5.000	17.000	53.00
5 kg	3.000	8.000	27.00
2 kg	1.000	3.000	10.00
1 kg	0.500	2.000	6.00
500 g	0.300	0.800	2.70
200 g	0.100	0.300	1.00

Column 1 Denomination	Column 2 Maximum permissible uncertainty (at 95% confidence interval): State primary standard (in mg)	Column 3 Maximum permissible uncertainty (at 95% confidence interval): State secondary standard (in mg)	Column 4 Maximum permissible uncertainty (at 95% confidence interval): State tertiary standard (in mg)
100 g	0.050	0.200	0.60
50 g	0.030	0.100	0.40
20 g	0.030	0.080	0.30
10 g	0.020	0.070	0.20
5 g	0.020	0.050	0.17
2 g	0.010	0.040	0.14
1 g	0.010	0.030	0.10
500 mg	0.008	0.030	0.09
200 mg	0.007	0.020	0.07
100 mg	0.005	0.020	0.06
50 mg	0.004	0.010	0.04
20 mg	0.003	0.010	0.04
10 mg	0.003	0.008	0.03
5 mg	0.002	0.007	0.02
2 mg	0.002	0.007	0.02
1 mg	0.002	0.007	0.02

Note The maximum permissible uncertainties in this table are based on OIML R 111.

[2] Schedule 9

substitute

Schedule 9 Maximum permissible uncertainty and maximum permissible variation — mass (Inspectors' Class 1, Class 2 and Class 3 standards)

(paragraph 27 (c), subparagraph 27 (e) (ii), paragraphs 28 (b) and (c) and regulations 29, 32, 33 and 34)

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
Denomination	Maximum permissible uncertainty (at 95% confidence interval): Inspectors' Class 1 standard (in mg)	Maximum permissible variation: Inspectors' Class 1 standard (in mg)	Maximum permissible uncertainty (at 95% confidence interval): Inspectors' Class 2 standard (in mg)	Maximum permissible variation: Inspectors' Class 2 standard (in mg)	Maximum permissible uncertainty (at 95% confidence interval): Inspectors' Class 3 standard (In mg)	Maximum permissible variation: Inspectors' Class 3 standard (in mg)
10 000 kg					533 333	1 066 667
5 000 kg					266 667	533 333
2 000 kg					100 000	200 000
1 000 kg					53 333	106 667
500 kg					26 667	53 333
200 kg					10 000	20 000
100 kg					5 333	10 667
50 kg	267.000	533.000	833.000	1 667.00	2 667	5 333
25 kg	127.000	253.000	417.000	833.00	1 267	2 533
20 kg	100.000	200.000	333.000	667.00	1 000	2 000
10 kg	53.000	107.000	167.000	333.00	533	1 067
5 kg	27.000	53.000	83.000	167.00	267	533

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
Denomination	Maximum permissible uncertainty (at 95% confidence interval): Inspectors' Class 1 standard (in mg)	Maximum permissible variation: Inspectors' Class 1 standard (in mg)	Maximum permissible uncertainty (at 95% confidence interval): Inspectors' Class 2 standard (in mg)	Maximum permissible variation: Inspectors' Class 2 standard (in mg)	Maximum permissible uncertainty (at 95% confidence interval): Inspectors' Class 3 standard (in mg)	Maximum permissible variation: Inspectors' Class 3 standard (in mg)
2 kg	10.000	20.000	33.000	67.00	100	200
1 kg	6.000	11.000	17.000	33.00	53	107
500 g	2.700	5.300	8.500	16.70	27	53
200 g	1.000	2.000	3.500	6.70	10	20
100 g	0.600	1.070	1.700	3.30	5	11
50 g	0.400	0.670	1.000	2.00		
20 g	0.300	0.530	0.800	1.70		
10 g	0.200	0.400	0.700	1.30		
5 g	0.170	0.330	0.550	1.10		
2 g	0.140	0.270	0.400	0.80		
1 g	0.100	0.200	0.350	0.67		
500 mg	0.085	0.170	0.270	0.53		
200 mg	0.070	0.130	0.200	0.40		
100 mg	0.055	0.110	0.170	0.33		
50 mg	0.040	0.080	0.130	0.27		
20 mg	0.035	0.070	0.100	0.20		
10 mg	0.030	0.050	0.080	0.17		
5 mg	0.020	0.040	0.070	0.13		
2 mg	0.020	0.040	0.070	0.13		
1 mg	0.020	0.040	0.070	0.13		

Note The maximum permissible uncertainties in this table are based on OIML R 111.

Notes

1. These Regulations amend Statutory Rules 1999 No.110, as amended by 1999 No. 185; Act No. 27, 2004.

2. Notified in the *Commonwealth of Australia Gazette* on / 2004. 18 June